

Keynote Address  
Stakeholder Meeting - Water Efficient Product Labeling  
Urban Landscape Irrigation Products  
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Opening Remarks

I certainly welcome this opportunity to speak to you today about our budding Water Star program for water-efficient product labeling. I'm going to talk about why this labeling program, and our other water-efficiency activities, are so important. (I should mention here that when I say labeling I'm including other market enhancement approaches, as well.) I will also explain why water-efficient urban landscape irrigation is so important to reaching our Water Star goals.

First, though, I'd like to clarify something. Since the announcement of Water Star last fall, we have a new EPA Administrator and I recently began as the Acting Assistant Administrator for Water. Support for the Water Star program is as high as ever. I can tell you that Administrator Leavitt is very enthusiastic about this program. As evidence of that, the President's 2005 budget for EPA contains \$800,000 for the water-efficient labeling program. I was a champion of this program as the deputy to Tracy Mehan, former Assistant Administrator for Water, and Water Star will continue to be a high priority for me. Water efficiency is a

priority of this Administration. In addition to our efforts, the Department of the Interior launched Water 2025 in June 2003, which addresses water supply issues in the West. That initiative also has aspects dealing with water infrastructure and water efficiency. And the Department of Energy is coordinating efforts on the part of federal agencies to improve water use efficiency in their own facilities. Our Water Star program will complement those programs. I also want to emphasize that our program will fully respect state water rights.

#### Importance of Water Star

The two major goals of the water-efficient product labeling program are to reduce or defer water and wastewater infrastructure costs and to conserve water supplies. The nation's water and wastewater infrastructure is aging. By our estimates, the gap between the investment in, and the need for, water infrastructure could total \$225 billion by the year 2020. The President's budget includes \$1.7 billion for FY 2005 to capitalize the State Revolving Loan Funds, but, clearly, funding alone is not the answer. EPA is putting emphasis on what we call the four pillars of sustainable infrastructure. Water efficiency, including Water Star, is one pillar, along with better management, full-cost pricing, and the watershed

approach. Please check out the Office of Water's new website, Sustainable Water Infrastructure for the 21<sup>st</sup> Century, for more information about these approaches.

We feel strongly that if more utilities adopt the principles of sustainable infrastructure, future needs for infrastructure could be significantly reduced or deferred. Take the case of Seattle Public Utilities. They use a seasonally-adjusted, inclining block, water rate structure and an innovative water efficiency program featuring incentives for the purchase of water-efficient products. They have reduced water demand by over 20% and they are still looking for more savings. Seattle also used asset management techniques to reduce their FY 2004 capital budget by 13%, and operating budget by 7%.

The other major goal of the labeling program is to conserve water supplies. From our vantage point it seems that the rate of occurrence of water shortages, water scarcities, and conflicts over water supplies is increasing. Last year, the U.S. General Accounting Office issued the results of a survey they conducted which found that 36 states expect to have a water shortage within the next ten years under

non-drought conditions.<sup>1</sup> Indeed, if we are to sustain our water supplies in the face of increasing population and economic growth, we must be increasingly smarter about how we use water.

And let's not forget the environmental benefits. Water Star will also help to maintain water levels in streams, rivers, lakes and estuaries, which helps protect aquatic habitats. It will also help prevent water pollution and reduce energy use. Water-efficient landscape irrigation products may have significant storm water management and water pollution prevention aspects as I'll explain in a moment. Taken together, that's a pretty impressive benefits package that Water Star has to offer.

### Importance of Water-Efficient Landscape Irrigation

We're here today to specifically discuss water-efficient landscape irrigation products. I understand that you spent much of this morning discussing the various water-efficient irrigation technologies, including the new generation of controllers and sensors. I believe that The Irrigation Association has coined the name Smart

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<sup>1</sup>U.S. General Accounting Office, States' Views of How Federal Agencies Could Help Them Meet the Challenges of Expected Shortages, GAO-03-514, July 2003

Water Application Technologies, or SWAT, for these products. That is a very aggressive-sounding acronym and a fitting one to use for attacking such a formidable problem. The Irrigation Association deserves a lot of credit for helping to move the industry toward more water-efficient technologies and practices and we're very excited about these new products and their market possibilities. But we know there will be challenges because these products work as part of a system and their performance depends on other components, as well as proper system design, installation, and management.

Our interest in urban landscape irrigation is based on:

- the amount of water it uses in both residential and non-residential settings,
- the seasonal and climatic nature of irrigation, and
- the potential for reducing excessive irrigation.

The amount of residential outdoor use is estimated to average about 32 gallons per person per day, and about 80 - 90% of that is for landscape watering.<sup>2</sup> Eighty percent of the households in the U.S. have a private lawn, totaling approximately

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<sup>2</sup>Vickers, A, Handbook of Water Use and Conservation, WaterPlow Press, 2001

18 million acres.<sup>3</sup> An average of 8 billion gallons per day of publicly supplied water is applied to residential landscapes.<sup>4</sup>

While those average numbers are impressive, it is the seasonal and climatic aspects of landscape irrigation that are also important. In some cities summertime irrigation water use can be 1.5 to 3 times normal winter water use, thus creating a water system's peak demand. Cities in hot, dry climates may experience even higher peaks. Peak water demand greatly influences water infrastructure sizing and costs. Tests have shown, however, that SWAT technologies may reduce seasonal landscape water use by as much as of 40 gallons a day per home.<sup>5</sup> Efficient irrigation, therefore, can have a significant effect on reducing or deferring water infrastructure costs.

Most landscape water use usually occurs during the summer when stream-flows may already be low, so reduced withdrawals for landscape irrigation also benefit aquatic life.

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<sup>3</sup>Vinlove, F. K. and Torla, R. F. Comparative Estimations of U.S. Home Lawn Area, *Journal of Turfgrass Management*

<sup>4</sup>Vickers, *ibid.*

<sup>5</sup>LA Times, Smart Sprinklers Sense Landscape Water Needs, March 31, 2003

A very exciting potential benefit of efficient landscape irrigation is reduced runoff. Preliminary tests have shown reductions of 45% in runoff from irrigated residential landscapes using SWAT technology.<sup>6</sup> If further testing confirms those results, the benefits from that level of runoff reduction would be very significant for preventing pollution from fertilizers, pesticides, and herbicides and for reducing storm water infrastructure costs.

### Closing

So, in summary, we see great potential for water-efficient landscape irrigation products and systems to help achieve the goals of Water Star: infrastructure cost reduction, water supply conservation, and water quality benefits to boot. That's a win-win-win worth working toward.

I want to thank all of you for your participation in this meeting and trust that you will have a productive afternoon. We intend to continue to work with you to further our mutual goal of water-efficient landscape irrigation.

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<sup>6</sup>LA Times, *ibid*